

WA State Consolidated Technology Services State Data Center Projects

Prepared By:	Consolidated Technology Services
Date: 7/27/2012	Period Covered: August 20 – August 31

Project Dashboard

Project Name	Scope	Schedule	Budget
SDC Program	Y	Y	G
OB2 Heat Reduction	G	G	G
SDC Facilities	G	G	G
SDC Network	Y	Y	G
SDC Firewall	G	Y	G
SDC Storage Optimization	Y	Y	G
SDC Cloud Utility Service	G	G	G
OB2/CTS Move Phase 1	Y	Y	G
Migrate WSP to SDC	G	G	G
Virtual Tape Library	G	G	G
OB2/CTS Move Phase 2	G	G	G
OB2 Data Center Optimization	G	G	G

Scope Key:

- G** = No issues are impacting scope
- Y** = Issues are being tightly managed, but may impact scope
- R** = Unresolved issues are preventing progress of identified scope

Schedule Key:

- G** = On schedule
- Y** = Key milestones are more than 2 weeks late
- R** = Key milestones are more than 8 weeks late

Budget Key:

- G** = Planned spending is within 5% to 10% of agreed upon budget
- Y** = Planned spending is within 11% to 20% of agreed upon budget
- R** = Planned spending is greater than 20% of agreed upon budget

		Baseline Budget as of 3/6/2012 Revised with NWC, Storage, Firewall Approved Investment Plans		As of 6/30/2012
Phase #	Phase	Budget-Funded	Budget-Unfunded	Actuals
0	SDC Program	\$2,729,570		\$1,473,146
1	OB2 Reduce Heat	\$0		
2	Facilities Op Readiness	\$2,673,817		\$1,267,008
3	NW Core Op Readiness	\$8,592,141		\$6,322,279
4	Firewall	\$2,179,779	\$1,491,800	
5	Storage Optimization	\$4,294,613		\$782,641
6	Cloud Utility Service	\$1,000,000		
7	OB2 Move Phase 1	\$5,807,543	\$893,271	
8	Virtual Tape Library	\$1,950,000		
9	OB2 Move Phase 2		\$4,338,749	
10	OB2 Data Center Optimization		\$1,500,000	
11	Migrate WSP	\$800,000	\$1,200,000	
Total		\$30,027,463	\$9,423,820	\$9,845,074

This graphic shows the baseline budget for all SDC projects
(includes both implementation costs and 5-yr maintenance commitments).

SDC Projects Status

Project	Planned for this Reporting Period (August 20 – August 31)	Status of Work Performed this Reporting Period (August 20 – August 31)	Planned for Next Reporting Period (September 3 - September 14)
SDC Program	<ul style="list-style-type: none"> Continue work on the following design decisions <ul style="list-style-type: none"> SDC Network Roadmap Nexus 2k use & design Converged Networking Continue development of the SDC migration roadmap. Work with teams on the SDC Out of Band Management design Work with teams on the SDC Security Connectivity 	<ul style="list-style-type: none"> Continued work on the following design decisions <ul style="list-style-type: none"> SDC Network Roadmap Nexus 2k use & design Converged Networking Worked on dependency mapping between divisions(roadmap). Worked with teams on the SDC Out of Band Management design Worked with team on the SDC Security Connectivity 	<ul style="list-style-type: none"> Continue work on the following design decisions <ul style="list-style-type: none"> SDC Network Roadmap Nexus 2k use & design Converged Networking Cisco Storage Switching Work on dependency mapping between divisions(roadmap). Document the SDC Out of Band Management design Continue work on SDC Security Connectivity Work on Cisco high level design
OB2 Heat Reduction Reduce the amount of heat being generated in the OB2 data center and provide an incident response plan.	<ul style="list-style-type: none"> Obtain a status update from facilities on progress of data input into the DCIM tool. We are exploring whether the tool could be used to provide the most up-to-date contact information. File agency data collection templates on the SDC Program's SharePoint site. Confirm contact information provided by agencies. 	<ul style="list-style-type: none"> Facilities team making progress inputting agency data into DCIM tool. Work will continue for a few more weeks. Contact information provided by agencies is being input at the same time. Agency data collection templates were placed on the SDC Program's SharePoint site. 	<ul style="list-style-type: none"> Confirm contact information provided by agencies. Finalize communication/outreach plan before September 30.
SDC Facilities Prepare the SDC facility for customers. Includes preparing the critical environment (electrical/mechanical), floor space and physical security for customers.	<u>Space Management:</u> <ul style="list-style-type: none"> Continue work on operating procedures Review comments from HR on position descriptions for 2 new staff. <u>Physical Security:</u> <ul style="list-style-type: none"> Working on approval for procurement of security separation Security office installation work underway for phones and network. <u>Critical Environment:</u> <ul style="list-style-type: none"> Review quote for DC power 	<u>Space Management:</u> <ul style="list-style-type: none"> Continue work on operating procedures Review comments from HR on position descriptions for 2 new staff. <u>Physical Security:</u> <ul style="list-style-type: none"> Security separation approved. Work will commence early September. Security office installation work underway for phones and network. <u>Critical Environment:</u> <ul style="list-style-type: none"> DC power ordered – work underway 	<u>Space Management:</u> <ul style="list-style-type: none"> Continue work on operating procedures Positions to be posted for two new data center technicians. <u>Physical Security:</u> <ul style="list-style-type: none"> Security segregation work ongoing. Security office installation work underway for phones and network. <u>Critical Environment:</u> <ul style="list-style-type: none"> DC Power work underway; to be completed by end of October.

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SDC Network Core Establish the network core in the SDC and connect with the OB2 network.	<ul style="list-style-type: none"> Continue discussions with Cisco to fine-tune project schedule for network design, installation, configuration, and testing. Continue to work with CenturyLink and Cisco on shortage of (SFP) parts Finalize Cisco Engineering High Level Design (HLD) deliverable. Finalize Cisco Rack & Stack equipment inventory and site survey deliverables. Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core. Continue work on OOB/FOOB Design Decision for SDC. Continue provisioning work for SDC/OB2 fiber path o support (OB2) Cisco M6 and CRS equipment moves to SDC. Continue work on server installation to support Cisco Network Management. Begin work on Cisco Low Level Design (LLD). Turnover “Other” Cisco Equipment Inventory to SDC Facility. 	<ul style="list-style-type: none"> Re-worked NWC Project Schedule to align with new Storage Design. CenturyLink and Cisco submitted an internal request to address part of the missing SFP parts; the remainder of the missing SFP's is still being researched by CenturyLink and Cisco. No impact to project schedule is anticipated. Did not finalize the NWC and Storage High Level Design, planned for next period. Did not finalize. Completed 1st review of Cisco Site Survey. Worked on OB2 Lab testing of 5K/7K MPLS and Fabric Path functionality. Completed draft of OOB Design Decision. Did not begin work on Cisco Low Level Design (LLD). Planned for next period. Completed turnover of “Other” equipment inventory to SDC Facility. 	<ul style="list-style-type: none"> Continue discussions with Cisco to fine-tune project schedule for network design, installation, configuration, and testing. Continue to work with CenturyLink and Cisco on remainder of missing (SFP) parts Finalize Cisco Engineering High Level Design (HLD) deliverable. Finalize Cisco Rack & Stack equipment inventory and site survey deliverables. Continue OB2 Lab testing of 5K and 7K - MPLS and Fabric Path functionality required for SDC Network Core. Continue work on OOB/FOOB Design Decision for SDC. Continue provisioning work for SDC/OB2 fiber path o support (OB2) Cisco M6 and CRS equipment moves to SDC. Continue work on server installation to support Cisco Network Management. Begin work on Cisco Low Level Design (LLD).
SDC Firewall Project Replace aged and over-capacity firewalls and deliver enhanced data security services to both OB2 and SDC.	<ul style="list-style-type: none"> Begin work with vendor to validate firewall design. 	<ul style="list-style-type: none"> Validated the high level design with the vendor. 	<ul style="list-style-type: none"> Validate the Low Level Design with the vendor

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SDC Storage Optimization Replace aged systems and optimize the environment to reduce rates.	<ul style="list-style-type: none"> Start Contract Negotiations Develop Statement of Work Install / Configure ESRS software Order SFP's for 5548's 	<ul style="list-style-type: none"> Contract Negotiations started Statement of Work started Test ESRS connections, schedule EMC to install software 5548 SFP design is being reviewed 	<ul style="list-style-type: none"> Continue Contract Negotiations – OLS/Presidio Continue Developing Statement of Work Complete ESRS Software installation and configuration Schedule installation of 4 -48 port line cards in OB2 9513s
CTS Cloud Utility Service Provide a Cloud utility platform for CTS customers.	<ul style="list-style-type: none"> No activity planned during this reporting period. 	<ul style="list-style-type: none"> No activity planned during this reporting period. 	<ul style="list-style-type: none"> No activity planned during this reporting period.
OB2 Risk Mitigation (CTS Move Phase 1) Move selected CTS equipment that best alleviates the heat issue in OB2.	<ul style="list-style-type: none"> Continue drafting the investment plan. Continue drafting project charter Finalize the project change request to adjust the scope of the project to meet CTS business needs. Continue refinement of the project task plan and schedule. 	<ul style="list-style-type: none"> Refined the investment plan. Target for completing a draft for management review is Sept. 7. No action taken on the project charter. Additional work on the charter will not be done until CTS has approved the investment plan. A final draft of the change request was complete but additional changes in the budget were identified. Updated the project task plan and schedule with WAN related projects and other minor changes. 	<ul style="list-style-type: none"> Complete a final draft of the investment plan for management review. Finalize the project change request. Initiate detail planning for system moves and supporting facilities and infrastructure.
Migrate WSP to SDC Explore the possibility of moving the WSP data center to the SDC.	<ul style="list-style-type: none"> Continue work to formalize the project's governance structure and steering committee. Initiate work sessions to develop the Phase 1 network design (these will be ongoing) Continue to gather hardware requirements for equipment enclosure/space planning. 	<ul style="list-style-type: none"> The project's governance structure and steering committee has been formalized. The first of several Phase 1 detailed network design sessions was conducted. Conducted a bi-weekly work session. A planning session was conducted to identify hardware requirements. Most of Phase 1 requirements have been identified. 	<ul style="list-style-type: none"> WSP to obtain feedback from the FBI on the need to cage WSP equipment. Begin development of an inter-agency agreement (IAA). Conduct work sessions to develop the Phase 1 network design (these are ongoing). Continue to gather hardware requirements for equipment enclosure/space planning. Continue development of SDC chargeback rates and WSP cost model.

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Virtual Tape Library Disaster Recovery (VTL) Procure additional VTL equipment to eliminate the tape backup system and support mainframe disaster recovery.	<ul style="list-style-type: none"> No activity was planned or performed for this reporting period. 	<ul style="list-style-type: none"> No activity was planned or performed for this reporting period. 	<ul style="list-style-type: none"> Hold a meeting to discuss VTL scope of work and dependencies.
OB2 Risk Mitigation (CTS Move Phase 2) Continue the progress of Phase 1 by moving additional CTS equipment to the SDC.	<ul style="list-style-type: none"> Continue refinement of task plan and schedule. 	<ul style="list-style-type: none"> Started work on defining WAN related projects. 	<ul style="list-style-type: none"> No activity planned for next reporting period.
OB2 Data Center Optimization Reconfigure remaining equipment in OB2 to optimize airflow and cooling.	<ul style="list-style-type: none"> No activity planned for next reporting period. 	<ul style="list-style-type: none"> No activity planned for next reporting period. 	<ul style="list-style-type: none"> No activity planned for next reporting period.

External Project Collaboration

External Project	Planned for this Reporting Period (August 20 – August 31)	Status of Work Performed this Reporting Period (August 20 – August 31)	Planned for Next Reporting Period (September 3 - September 14)
Server Virtualization Virtualize 60% of CTS physical servers by 7/1/12.	<ul style="list-style-type: none"> TSD OSS Servers – Send quote and provision the virtual servers in anticipation of Sept 8-9 virtualization. 	<ul style="list-style-type: none"> Continued preparation for TSD OSS Server virtualization. 	<ul style="list-style-type: none"> Complete TSD OSS Server virtualization, bringing the total % of servers virtualized to 62%. Determine next steps for project.
Command Center Establish command center support for the SDC.	<ul style="list-style-type: none"> Waiting on a decision to determine the location of Command Center in the SDC or 1500 Jefferson Building before additional planning can be completed. 	<ul style="list-style-type: none"> No action planned. 	<ul style="list-style-type: none"> No action planned.
Replace Cisco MDS 9509 SAN Fabric Switches Replace SAN fabric switches in OB2 that are at end of vendor support.	<ul style="list-style-type: none"> Assess the FMS audit and define parameters 	<ul style="list-style-type: none"> Continue development of the High Level Design Continue development of the Project Charter and Project Management documents 	<ul style="list-style-type: none"> Complete the High Level Design Finalize the Project Charter Schedule a Facility Consultation

External Project	Planned for this Reporting Period (August 20 – August 31)	Status of Work Performed this Reporting Period (August 20 – August 31)	Planned for Next Reporting Period (September 3 - September 14)
VLAN Renumbering Optimize VLAN numbering	<ul style="list-style-type: none"> Gather existing documents (charter & WBS) and start planning. 	<ul style="list-style-type: none"> Gathered existing documents and started planning. 	<ul style="list-style-type: none"> Project planning meeting scheduled for 9/13. High level schedule should be completed by the end of September
PBX Implement new PBX system	<ul style="list-style-type: none"> Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project. 	<ul style="list-style-type: none"> No action planned. 	<ul style="list-style-type: none"> Nothing Planned -- Waiting for Cabinets, Power, and Structured Cabling to be ready before moving forward with project.

Top 4 Issues *

Issue Key: *Green* = Issue does not require action within 30 days, *Yellow* = Issue requires action within 30 days, *Red* = Issue requires action within 10 days or less

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
132	Roles & Responsibilities for the Storage Switches and converged network need to be defined. This includes who manages the SDC fiber channel switches and the roles and responsibilities for troubleshooting fiber channel over Ethernet (FCoE) across the converged network.	SDC	Y	11/3/2011	08/15/2012	9/1/2012	Issue still being worked by TSD and CSD.	Open
134	Will agencies be allowed to bring their corporate networks into the SDC? This impacts network routing, top-of-rack switches and firewalls as these components would come with an agency corporate network.	TSD	G	11/4/11	7/19/12	9/5/12	Internal Vetting is almost complete. Next steps is a discussion at next the SDC Steering committee meeting.	Open
145	Potential SDC Customers will need to know the billing rates for SDC products and services before they move into the SDC. Both DSHS and WSP have stated that they will not move into the SDC until they know what ongoing operations will cost.	Finance	Y	3/16/21	7/19/12	9/1/12	The CTS Finance group continues to work this.	Open
204	A decision is pending from the FBI if the SDC physical security requirements meet CJIS compliance. This decision will determine if a cage is necessary for WSP (and other agencies) equipment. The decision is taking longer than expected and is impacting the schedule.	SDC/WSP	Y	9/4/2012	9/19/2012	9/10/2012	xxx	Open

Issues Closed this Period

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
197	A decision on the Cloud procurement is needed around September 2012 or it will start impacting the server move schedule.	SDC	Y	7/16/2012	8/1/2012	9/1/2012	A decision has been made to refresh virtual hosts.	Closed

Issue #	Summary Description	Assigned	Priority (R,Y,G)	Opened Date/by	Next Review Date	Target Resolution Date	Resolution	Status
196	A Pathway is needed to connect the 9513 switches in the OB2 East data center to the fiber patch panels that connect to the SDC. Running the cables under the floor tiles is not an option as this worsens the cooling problem in OB2.	SDC	Y	7/10/2012	08/13/2012	8/13/2012	The design decision was approved and the Data Center team is proceeding with completion of the design.	Closed
201	Identify fiber pathways needed to re-home storage connected devices in the WDC to the OB-2 9513s in the EDC	Datacenter team/CSD	Y	8/3/2012		9/1/2012	This effort will be coordinated in the 9509 migration project and will include CSD and facilities.	Closed
202	The storage switching design (HLD) arrived upon by the collaboration between CTS and the Cisco Advanced Services team does not match the storage switching hardware on hand.	TSD/CSD/SDC	Y	8/15/2012		9/5/2012	Order 4th generation Crossbar fabric modules for the existing MD9513 switches (two each) that will provide for non disruptive 4th Generation line card use in the future.	Closed

Change Requests *

No.	Description	Requestor	Request Date	Assigned	Cost Impact	Schedule Impact	Status
	None for this reporting period						

Status (Submitted, Proposal, Approved, Opened, Resolved, Verified, Closed)

Top 5 Risks *

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
1	Customers that were expecting to come into the SDC right away must now wait longer, which has end of life/investment implications	Man	3	R	G	G	Communicate with customers the new plan and schedule.	Ongoing	Program Manager

ID	Risk Description	Risk Category	Level of Impact	Likelihood	Schedule	Ability to Meet Deadline	Risk Mitigation Comment	Due Date & Action	Assigned To
2	Timing may force a need to place hardware in OB2, which has an adverse impact on the heat reduction effort.	Cap	2	Y	G	G	<ul style="list-style-type: none"> Work with customers to identify solutions that minimize additional heat in OB2. Institute OB2 heat reduction initiatives to turn off unused servers Delay implementation of new hardware in OB2 as late as possible 	Ongoing	Facilities
3	Because the project is large and includes substantial logistical challenges involving multiple projects/agencies, interdependencies will be complex and could be overlooked.	Man	1	R	G	G	<ul style="list-style-type: none"> Apply project management practices to manage the effort. Break the work down into small and logical units. Use tools to track tasks, dependencies, issues, risks, etc. and automate the planning and communications as much as possible. Implement migration approaches that minimize impacts of system dependencies, such as spanning the network between the OB2 and SDC data centers. Use development and test platforms to verify system dependencies. 	Ongoing	Sr. Project Manager
4	Even though the scope has been reduced to better match the budget, it may be insufficient. Several items remain unfunded.	Res	1	R	G	G	<ul style="list-style-type: none"> Request funding for unfunded projects Identify other funding sources (if possible) Reduce project scope Back-log unfunded projects 	Ongoing	Program Manager
5	Resource Conflict – Program relies on functional staff with competing priorities.	Res	1	R	G	Y	<ul style="list-style-type: none"> Provide clear management guidance on priorities and carefully manage functional staff to minimize conflicts in priorities and work tasks. Expand resource management and track task assignments to the resource level. Identify areas in the plan where resource loading indicates a problem and take appropriate action. 	Ongoing	Sr. Project Manager

Risk Category = (Res)ources; (Man)agement; (Tec)hnology; (Fun)ctional; (Dev)elopment; (Int)erfaces; (Sec)urity; (Usa)bility; (Ava)ilability; (Per)formance; (Cap)acity; (Sca)lability; (Ext)ernal.

Level of Impact Key:

1=major impact
2=significant impact
3=minor impact
0=no impact

Likelihood Key:

G = Low.
Y = Moderate
R = High

Schedule Key:

G = on schedule

Y = Less than 30 days behind schedule (caution)

R = More than 30 days behind schedule (warning)

Ability to Meet Deadline Key:

G = based on current information, it appears manageable

Y = there are significant obstacles or areas of uncertainty or concerns

R = there are clearly identifiable threats or deterioration of ability to manage and control

Steering Committee Action Items

Item #	Item Description	Assigned	Date Assigned	Date Due
1	No pending action items			